# MISSISSIPPI BAND OF CHOCTAW INDIANS Alternative Energy Project



Department of Energy
Alternative Energy Conference
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### **Tribal Overview**



- •8,900 Tribal Members (50% blood quantum)
- •50% < 18 years of age
- •35,000 acres (non-contiguous)
- •6 Elementary Schools, 2 Middle Schools & 1 Boarding High School
- •Police & Fire Department
- •Attorney General's Office & Tribal Supreme Court

### **Economic Conditions**



- •8,000 full-time employees in Mississippi (\$1.2 billion impact)
- •1,100 employees in Mexico (NAFTA)
- •15 tribal companies
- •Manufacturing, Digital Mapping, Printing, Tourism, etc.
- •McDonald's, Ford, Chrysler, Pepsi-Co, Caterpillar, etc.
- •452 Tribal Members in college

### **Economic Challenges**



- •Create meaningful career opportunities for tribal members with college degrees
- •Diversify the tribal economy
- •Ensure availability of affordable and dependable infrastructure (water, sewer, electricity, telecommunications & roads)

ie, Alternative Energy Project

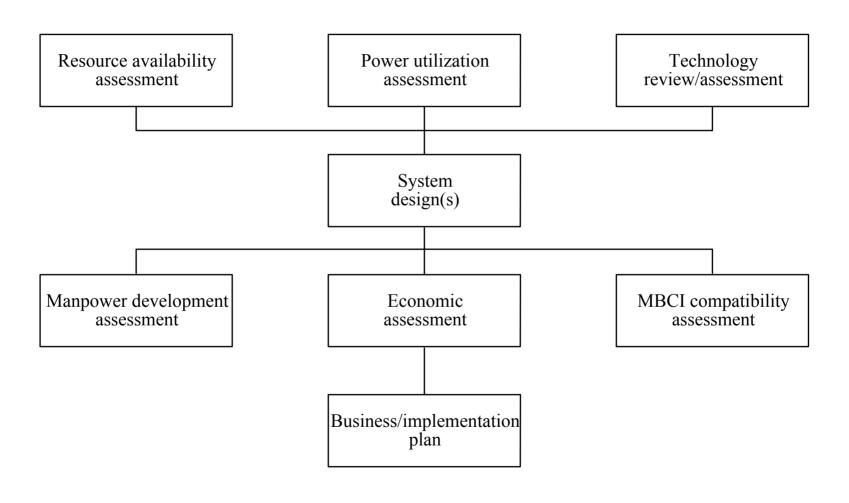
### The Team



- •Mississippi Band of Choctaw Indians -- Owner
- •Mississippi Alternative Energy Enterprise -- Project Manager
- •Mississippi State University, Diagnostic & Instrumentation Lab --Technical Analysis
- •Mississippi State University, Food & Fiber Center -- Business Plan Analysis
- •Choctaw Geo Imaging -- Digital Mapping & Spatial Data

## Feasibility Study Work Elements





### **Technology Assessment**



#### Source terms

Resource availability
Poultry litter
Litter + wood residues

Power utilization
Tribe
Contiguous areas

#### Process technologies

#### Power

Delmarva study NERL input TVA USDA study AEE studies

CPC FibroWatt

Power + products USDA study TVA BTI MissChem

#### Evaluation criteria

Facility can be sized to process available feed

Value of output of facility >> value of input

## System Design



- "Venture guidance" system design(s) will be developed for process technologies that satisfy evaluation criteria
- Design will be in sufficient detail to enable meaningful assessments of
  - Capital and operating costs
  - Manpower
  - Environmental impacts
- As much as possible, vendor-supplied information or other existing information will be used
- System design will include:
  - Feed (poultry litter, poultry litter + wood residue)
  - Energy, products, effluents
  - Process operations
  - Auxiliary support functions (e.g., transport of feed material)

## **Result of Study**



• Business / implementation plan sufficient to support decision by MBCI on whether to proceed



# THANK YOU!